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| 10/825,243 | 04/16/2004 | Olivier Martinot | Q80984 | 7788 |
| 23373 7590 09/18/2008 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 | | | EXAMINER MAHMOUDZADEH, NIMA | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/825,243

Applicant(s)

MARTINOT ET AL.

Examiner

NIMA MAHMOUDZADEH

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
4a) Of the above claim(s) 19 and 26 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-8, 13, 16-18, 20-25, 27, and 28 is/are rejected.
7) ☒ Claim(s) 9-12, 14 and 15 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on 05/21/2008 has been entered. Claims 1-18, 20-25, and 27-29 are still pending in this application, with claims 1 and 29 being independent.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-8, 13, 16-18, 20-22, 25, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwama et al. (US Patent No. 6,600,735) in view of Gous et al. (US Patent Publication No. 2002/0194316).

Regarding claim1, (original): Iwama et al. a device (D) (Fig. 1, element 103) for managing the measurement of parameters of end-to-end type data streams (In Fig. 1, element 103 perform a bandwidth controlling function which is based on some sort of bandwidth measurement) in a communication network (N) (Fig. 1, Network 110) composed of at least two domains (Ai) coupled together (Fig. 1, Zone 1 and Zone 2), and each equipped with a measuring appliance (Mi) (Fig. 1, element 102 and also, Fig. 8, element 102 and sub-element 1705 which controls the bandwidth) capable of delivering local measurements representing parameter values of local end-to-end data streams (Abstract discloses the communication bandwidth which is managed by using element 103, gateway device and routers, which gateway's function is like a router), where said measuring appliances (Mi) implement various measuring processes (Fig. 1, element 102 and also, Fig. 8, element 102 and sub-element 1705 which controls the bandwidth), but fail to teach a device characterised in that it includes

(i) monitoring means (MM) arranged so as to order the constitution of a specific measurement configuration in each measuring appliance (Mi) as a function of at least its measuring process and overall measurement specifications, and

(ii) calculation means (CM) arranged so as to deliver first data representative of the parameter values of overall end-to-end data streams from local measurements delivered by the said configured measuring appliances (Mi). However, Gous et al. teach a device characterised in that it includes

(i) monitoring means (MM) arranged so as to order the constitution of a specific measurement configuration in each measuring appliance (Mi) as a function of at least its

measuring process and overall measurement specifications (Fig. 1, element 30 which perform the bandwidth allocation function), and

(ii) calculation means (CM) arranged so as to deliver first data representative of the parameter values of overall end-to-end data streams from local measurements delivered by the said configured measuring appliances (Mi) (Fig. 1, element 32 and also paragraph [0035], instruct the node to send data and receive confirmation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements disclosed by Gous et al. in order to increase the quality of communication between two parties.

Regarding claim 2, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 1, wherein said monitoring means (Fig. 1, element 30 of Gous et al. which perform the bandwidth allocation function) is arranged to order the constitution of the specific measurement configuration in each measuring appliance as a function of the corresponding measuring process (claim 18 of Gous et al.), second data representing an arrangement of the respective associated domain and overall measurement specifications (claim 1 of Iwama et al. discloses the information provided to Bandwidth Controller regarding some elements of each zone, first and second).

Regarding claim 3, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 1, wherein said monitoring means includes an interface means for defining said overall measurement specifications (On Fig. 1 of Gous et al., element between elements 30 and 32).

Regarding claim 4, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 1, wherein said monitoring means (Fig. 1 of Gous et al., element 30) includes configuration means for determining a configuration data for each measuring appliance (Figs. 1 and 5 of Gous et al., element 56), including determining local specifications of measurements and defining the specific measurement configuration of each measuring appliance based on the determined local measurement specifications (Figs. 1 and 5 of Gous et al., element 56).

Regarding claim 5, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 4, wherein said configuration means is arranged to further determine the configuration data by determining data representing a correspondence between said determined local measurement specifications and said overall measurement specifications (Figs. 1 and 5 of Gous et al., element 56).

Regarding claim 6, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 5, wherein said storage means includes a first memory to store data representing said overall measurement specifications (Fig. 1 of Gous et al., element 26).

Regarding claim 7, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 6, wherein said storage means includes a second memory to store data representing at least one of said local measurement specifications or said configuration data (Fig. 1 of Gous et al., element 28).

Regarding claim 8, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 7 wherein at least one domain includes a measuring

appliance implementing a measuring process based on a measurement model, and wherein said storage means includes a third memory to store data representing said measurement model (Fig. 1 of Gous et al., element 56 is a table which is saved in a memory).

Regarding claim 13, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 8, wherein said main calculation module is arranged to determine said first data from local measurements delivered by the said configured measuring appliances, the said local measurement specifications, at least one value aggregation model and at least one of said measurement models (Fig. 1 of Gous et al. element 32 and also paragraph [0035] of Gous et al.).

Regarding claim 16, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 4, wherein said calculation means includes an auxiliary calculation module arranged to determine second data representing the respective contributions of the coupled domains to the first data, from the local measurements delivered by said configured measuring appliances and said local measurement specifications (Fig. 2 of Gous et al. and also paragraphs [0040] and [0041] of Gous et al.).

Regarding claim 17, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 16, wherein said auxiliary calculation module determines the second data representing at least one of relative contributions or absolute contributions (Fig. 2 of Gous et al. and also paragraphs [0040] and [0041] of Gous et al.).

Regarding claim 18, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 16, wherein said storage means includes a first memory which stores at least one of said first or second data (Fig. 1 of Gous et al. element 24 is the storage unit).

Claim 19, (canceled).

Regarding claim 20, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 16, further including:

an output interface coupled to said calculation means to deliver at least one of said first or second data at an output when so ordered (Fig. 1 of Gous et al. the connection between element 30 and element 32).

Regarding claim 21, (currently amended): Iwama et al. in view of Gous et al. teach the device or arrangement as in claim 18, further including:

an output interface to extract at least one of the said first or second data from the first memory at an output when ordered to do so (Paragraph [0031] of Gous discloses the connection between the storage unit and the rest of the elements).

Regarding claim 22, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 20, further including:

a management information database to receive at least one of the first or the second data from said output interface (Fig. 1 of Gous et al. element 24).

Regarding claim 25, (currently amended): Iwama et al. in view of Gous et al. teach a communication network which includes at least two domains coupled together and each including a measuring appliance to deliver corresponding local measurements

representing the parameters values of the local end-to-end data streams (Fig. 1 of Iwama et al.), wherein said measuring appliances implement different measuring processes, and further including at least one managing management device of claim 1 (Fig. 1 of Iwama et al. element 103 is the central managing device. Also each zone has its own measuring device).

Claim 26, (canceled).

Regarding claim 28, (new):): Iwama et al. in view of Gous et al. teach the device as in claim 1, wherein the measuring appliances (Fig. 1, element 102 which can be a router as well) comprise:

a first measuring appliance associated with a first network domain and executing a first measuring process to collect the local measurements of a first local end-to-end data stream which traverses the first network domain (Fig. 8, element 1705);

a second measuring appliance associated with a second network domain, coupled with the first network domain, which second measuring appliance executes a second measuring process to collect the local measurements of a second local end-to-end data stream which traverses the second network domain (Fig. 8, element 1709);
and

a third measuring appliance associated with a third network domain, coupled with the second network domain (Fig. 8, element 1710), which third measuring appliance executes a third measuring process to collect the local measurements of a third local end-to-end data stream which traverses the third network domain, wherein each first,

second and third measuring process differs from other measuring processes being executed and includes one of (Fig. 8, element 1710):

- a passive measuring process which collects information of each type of a data stream and of each packet of the data stream (Fig. 8, element 1710),

- an active measuring process which collects information on a periodic basis, or

- a measuring process based on a measurement model generated in advance for a corresponding network domain.

Regarding claim 29, (new): Iwama et al. teach a multi-domain management device (Fig. 1), which domains are coupled to one another and facilitate a passage for an overall end-to-end data streams, as a function of at least a corresponding measuring process of the measuring appliance and overall measurement specifications of the network (Fig. 1, from element 105-a to 105-b) but fail to teach a multi-domain management device comprising:

- a monitoring module to generate and initiate a measurement configuration for measuring appliances executing various measuring processes and being associated with corresponding domains of a network;

- configuration modules, each coupled to the measuring appliances executing an alike measuring process, to configure each measuring appliance based on the generated measurement configuration so that the configured measuring appliances deliver local measurements representing parameter values of corresponding local end-to-end data streams, which each traverses the associated network domain, based on the corresponding measuring processes; and

calculation means, coupled to the configuration modules, for determining data representative of parameters values of the overall end-to-end data streams based the delivered local measurements of the local end-to-end data streams. However, Gous et al. teach a multi-domain management device comprising:

a monitoring module to generate and initiate a measurement configuration for measuring appliances executing various measuring processes and being associated with corresponding domains of a network (Fig. 1, element 30 which perform the bandwidth allocation function;

configuration modules (Fig. 1, element 30 and elements inside it), each coupled to the measuring appliances executing an alike measuring process (Fig. 1, element 30 is coupled to the all the nodes), to configure each measuring appliance based on the generated measurement configuration so that the configured measuring appliances deliver local measurements representing parameter values of corresponding local end-to-end data streams (Fig. 1, based on bandwidth routing is done), which each traverses the associated network domain, based on the corresponding measuring processes (Fig. 1); and

calculation means, coupled to the configuration modules, for determining data representative of parameters values of the overall end-to-end data streams based the delivered local measurements of the local end-to-end data streams (Fig. 1, element 32 and also paragraph [0035], instruct the node to send data and receive confirmation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements

disclosed by Gous et al. in order to increase the quality of communication between two parties.

4. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwama et al. (US Patent No. 6,600,735) in view of Gous et al. (US Patent Publication No. 2002/0194316) further in view of Maher et al. (US Patent No. 5,381,403).

Regarding claim 23, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 1, but fail to explicitly teach the device further including:

a configuration interface of which includes:

interface modules, each dedicated to a corresponding specific measuring process, coupled to said monitoring means said measuring appliances, which execute the corresponding specific measuring process, and said calculation means, and arranged to configure the corresponding measuring appliance, collect the local measurements from each corresponding measuring appliance, and in order to supply the collected local measurements to said calculation means. However, Maher et al. teach the device further including:

a configuration interface (Fig. 1, element 102) of which includes:

interface modules (Fig. 1, elements 107, 108, and 109), each dedicated to a corresponding specific measuring process modules (Fig. 1, elements 107, 108, and 109 and coupled to different sites 103, 104, and 105), coupled to said monitoring means said measuring appliances (Fig. 1, elements 107, 108, and 109 and coupled to different

sites 103, 104, and 105), which execute the corresponding specific measuring process (Column 3, line 58- column 4, line 2), and said calculation means, and arranged to configure the corresponding measuring appliance, collect the local measurements from each corresponding measuring appliance, and in order to supply the collected local measurements to said calculation means (Fig. 1, and also, column 3, line 58- column 4, line 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. in view of Gous et al. to include the interface modules disclosed by Maher et al. in order to decrease the delay and improve the precision of the communication with less error.

Regarding claim 24, (currently amended): Iwama et al. in view of Gous et al. further in view of Maher et al. teach the device as in claim 23, wherein at least one of said interface modules includes:

an external measuring appliance for one of the coupled domains a domain of said communication network (Fig. 1 of Gous et al. also Fig. 1 of Maher et al. central controller).

5. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwama et al. in view of Gous et al. further in view of Muirhead et al. (US Patent Publication No. 2003/0123446).

Regarding claim 27, (currently amended): Iwama et al. in view of Gous et al. teach the network as in claim 25, but fail to explicitly teach the network comprised of one of:

a transmission network including at least one of a WDM, a SONET or an SDH network type in particular,

a data network including at least one of an IP-Internet or an ATM, network, and

a speech network including at least one of a conventional, a mobile or a NGN network. However, Muirhead et al. teach the network comprised of one of:

a transmission network including at least one of a WDM, a SONET or an SDH network type in particular (Fig. 2),

a data network including at least one of an IP-Internet or an ATM, network (Fig. 2), and

a speech network including at least one of a conventional, a mobile or a NGN network (Fig. 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the network of Iwama et al. in view of Gous et al. to include different networks such as SDH, ATM and wireless network disclosed by Muirhead et al. in order to be able to serve different types of networks.

Allowable Subject Matter

6. Claims 9-12, 14, and 15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIMA MAHMOUDZADEH whose telephone number is (571)270-3527. The examiner can normally be reached on Monday - Friday, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chirag G. Shah can be reached on (571) 272-3144. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NIMA MAHMOUDZADEH/
Examiner, Art Unit 2619

Art Unit: 2619

/Chirag G. Shah/

Supervisory Patent Examiner, Art Unit 2619